

How to Ensure Your Supply Chain Data Meets Your Goals



Supply chain executives have a dizzying amount to manage today.

They've got to shift their focus daily, sometimes even minute-to-minute, from immediate crises to planning for a future free of them. Whether it's delays and disruption or regulatory requirements and risk mitigation, data provides an answer for every question that arises. Data affects every step of the supply chain.



Planning – Historical Data



Sourcing - Supplier Data



Production – Live Data



Inventory – Demand Data



Logistics – Shipping Data

To have the most value, data must be managed for alignment with your goals, systems, and processes; collected, prepared, and stored from the beginning to maximize its usefulness; and, most importantly, accessible to stakeholders who could benefit from its insights — consistent of course with your data access control policy or the principle of least privilege.

What is it?





Master Data Management and Governance

Assess your data, systems, team, and software for alignment with your goals.

Data management is the solution to a problem you might not even know you have. The problem? Businesses are collecting vast amounts of data today — but much of it isn't useful. A few common culprits make it much more difficult to uncover and manage supply chain risks and opportunities.

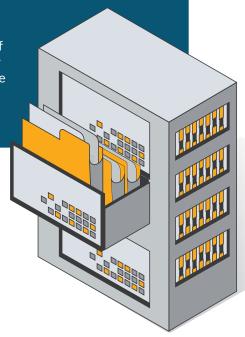
- Duplicate data This data monopolizes space in your database and slows processing speed. The different formats make "dupes" hard to pinpoint, cleanse, and remove.
- Disparate data A common issue affecting supply chain and procurement departments, "siloed" data across the organization makes access and analysis difficult.
- Decayed data As organizations rapidly shift suppliers and partners amid global disruption, the data you're keeping quickly deteriorates from inaccurate to obsolete.
- Contradictory data If files or data sets exist with incongruous information, it's clear your organization is improperly maintaining data. What's not clear is which data is correct.
- Incomplete data Records and data sets with missing fields can be appended through robust thirdparty sources, but it will take time.

Supply chain and procurement professionals need the right data, organizational structure, and processes to convert data into action. Prioritizing data practices from the top down can galvanize departments and launch your organization beyond competitors.

What is it?

Data governance is a specification of decision rights and an accountability framework to ensure the appropriate behavior in the valuation, creation, consumption, and control of data and analytics. (*Gartner*)

One of the biggest hindrances to data governance in many companies is a lack of understanding as to who actually holds responsibility for data governance. If supply chain managers can start effecting change from within, this in turn can lead the broader organization to long-term success. This chapter looks at how to start that transformation.





Step 1: Data

DATA







TEAM SOFTWA

The first requirement in any data project is rationalizing the data.

Data must be cleansed, harmonized for consistency across sources, and formatted for analysis. Historical data can be a challenge to rationalize, but it is important to do so.

Lynn Overall, a distinguished and accomplished architect at Dun & Bradstreet (D&B), asserts that data has been the "primary determinant of success" in the supply chain transformation projects he's seen in consulting with 100+companies in retail, CPG, finance, insurance, and more industries.

"The best way I've found to help a customer is to understand what their short- and long-term goals are, and then understand how the data that we have can help them achieve those goals," Overall says. "Frequent conversations need to take place to confirm that the goals — and therefore the data — remain the same."

Quick Case Study: Broadcast TV Service Provider

Overview: This major broadcast TV service provider had a history of success in marketing to

customers. The issue they encountered was that they didn't know what made them successful. They needed that answer to defend their market leader position, conduct risk analyses, find new prospect opportunities, and prepare for new market entrants.



Problem: The company had to rationalize 20 years of marketing and customer data first before they

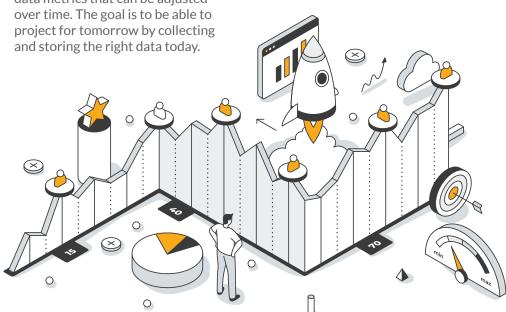
could identify a) which customers they needed to target to continue growing and b) which marketing campaigns had been most successful. Unfortunately, they had not been capturing the same information for each customer and each campaign.



Outcome: This company found that the information they needed for that historical analysis wasn't

in existence. They were able to work with what they had and fill in some gaps by making assumptions, but the project wasn't as successful as it could have been if they'd been more intentional about their data collection.

Accurate data, data without error, and persistent data — the process where the code that created the files stops working, but all those files still exist — are the keys to forward-looking analysis. It's also critical to establish data metrics that can be adjusted over time. The goal is to be able to project for tomorrow by collecting and storing the right data today.



Step 2: Systems

Legacy systems can be a major challenge for businesses.

They can be difficult to maintain, can be slow, and can be incompatible with newer systems. In the case study of the broadcast TV service provider, legacy systems prevented them from being able to analyze their historical data and make informed decisions about how to market to their customers.

If you have legacy systems in your business, it's important to consider how they are affecting your ability to operate effectively. If your legacy systems are preventing you from making informed decisions, it may be time to consider some upgrades.

However, it's important to remember that technology is not the only solution. The people who use technology are just as important. If your team is not trained in how to use the technology, or if they are not familiar with the data, they won't be effective.









SYSTEMS

MS

EAM

SOFTWARE



Step 3: Team

Assessing your team is as important as assessing your systems.

If your data and systems are up to date but something still isn't working, take a step back to look at your team. Most internal resources don't have a view on all the data available to them or all the options for third-party data enrichment that will allow them to change the paradigm. People get set in their ways of analyzing the same thing or building reports the same way with the same data.

Make sure that they have the skills and knowledge they need to use available technologies effectively. And make sure that they are familiar with the data. Data teams that have successful outcomes usually bring in members with different viewpoints and different strengths — architects, analysts, scientists, business leaders, and legal experts. It's also helpful to have a cohort of data users from within your supply chain and procurement teams who can offer practical considerations to the team that executes requests.



DATA

SYSTEMS



TEAM



SOFTWARE

What is it?

Upskilling your team is a constant process, one that should create an environment where everyone from the analysts to the data end users are nimble in the systems and able to answer new questions with data, not just defaulting to the same familiar operations. With ongoing training, team members are empowered to lead from within.

Step 4: Software









DATA

SYSTE

EAM

Most data architects recommend that a combination of skillsets and tools is the best way to ensure success in technology and analytics.

Rather than seeking out the one endall, be-all solution, selecting the best solution(s) for your specific needs will assist in achieving your goals and increase the likelihood of success. Overall is accomplished and certified in a broad range of software, including Microsoft, SAP, and Oracle, and advocates that his contemporaries and D&B customers follow this example.

"I always compare software to different religions," Overall says. "I'm agnostic. I don't have an affinity to any one platform, or a hardline perspective on what is needed to analyze and present your results. What you have is the best tool to use at the time. Our job as technologists is to help you do better with whatever tools you have without forcing you to make a technology decision."

A decision to implement new technology will significantly change your project scope. Expect to add 18 months to your projected timeline — and know that a small team may not be able to address both the implementation and the analysis at once. In addition to employee or personnel bandwidth, you will have to consider budget capability and allocation.

Once the data, systems, team, and software are in place, you're ready to look beyond what's in-house and out to the market space to see what's available. By looking outside, you may uncover solutions you couldn't before.

"Here at D&B, we have a diverse set of data that we can integrate on the fly using your preferred platform. Layering additional AI [artificial intelligence] on top of that can help uncover downstream supply chain issues, or financial risks, or a multitude of other metrics that could be affecting your suppliers, products, or items that sit on your shelves," Overall explains. "At D&B, we monitor those metrics that are important to you and have utilities to notify you to help intercept problems before they happen."





TIP:

Bringing on a data architect or consultant can help you start immediately to rationalize the data that you have, augment and enrich it, and assist in analysis using your current tools.

The Difference Between Good Data and Big Data

Save the right data and ensure it's accessible and useful — but timely deletion will avoid regulatory risks and unnecessary costs

To Archive or Not

There's one school of thought among data scientists and analysts that data loses its value once it becomes outdated. However, others in the field assert that the longer you maintain data, the more value it contains because data can be used to track trends, identify patterns, and make predictions.

What is it?

Data archiving is migrating data from a primary storage system onto a secondary system, predominately for long-term retention.

So, should you archive data always or never? Most data scientists fall somewhere in between the extremes. They establish an internal set of best practices and rules that are used to archive some data. They decide when data is no longer active or useful, and then move it from quickly accessible, daily-use production systems to long-term storage where it is only rarely retrieved. Archiving data typically saves money and optimizes system resources.

When deciding to archive data, first consider legal requirements such as privacy and data security regulations or future compliance purposes (e.g., audits). Then consider the value of the data over time, which can be measured by assessing its perceived value to illuminate trends, patterns, and predictions.

Maintaining data beyond your legal requirement to do so may introduce added risks. You must weigh the costs needed to store, access, and secure archived data and the benefit you get from this process.

Keep or Toss Legacy Data

Legacy data is typically stored in outdated or obsolete systems. Rather than assess the data by the system, assess the data for its own merits. Then keep the systems around long enough to serve the relevant data. Generally, the biggest determining factor here is legal or regulatory. There are legal guidelines around how long you should and can keep data, so consult the expert team you put together (refer to "Step 3: Team" earlier in this paper) to confirm you're in compliance.

Given that there's bad data everywhere, make sure the data you decide to keep is good data. Gartner studies show bad data costs the average large organization \$15 million a year and poor data quality further impedes labor productivity by 20%. As companies look to tighten their belts ahead of a possible recession, that's an area of cost savings you can't ignore.

The best place to ensure that data is accurate is at the point of entry. For supply chain analytics success, a database needs to be as complete, accurate and comprehensive as possible without being too much. You can't guarantee accuracy if you have an unmanageable amount of data. And you'll never get accurate projections out of questionable data.

Good data is more important than big data.

Just Enough Data to Be Useful

Even data analysts may disregard available data when short on time, resources, and systemic knowledge. Overdoing data collection or keeping more data than needed will only increase the odds of suffering from analysis paralysis. Be strategic about what you keep, and you remove the excuse to procrastinate. Why defer to tomorrow what you can do today?

Half of people working with data are wasting their time hunting for data, finding and correcting errors, and searching to confirm data they don't trust. (Harvard Business Review)

Working with a data supplier like Dun & Bradstreet gives organizations access to data and metrics in the now, along with the best practices to follow to be successful. Metrics and insights must be consumed in a timeframe which can help adjust a company's strategic vision. If you have a data partner or a data team providing your supply and procurement functions with this insight, use it. You don't know what you don't know.

Once you've addressed all these pain points, you're on the path toward establishing a repeatable data governance process. At this point you might ask yourself: Where could I have fallen short before? Which aspects of our data management initiative need better focus or reinforcement?

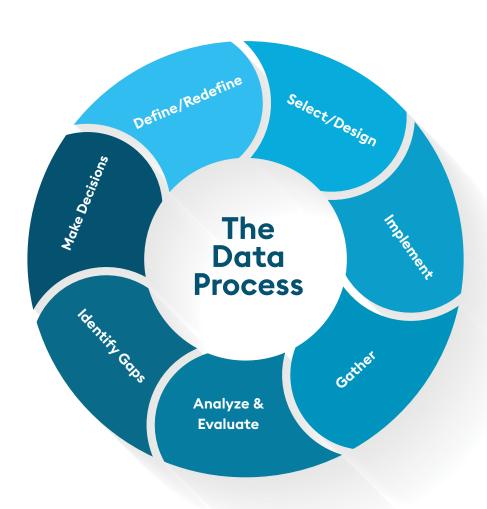
Quick Case Study: Online Auto Marketplace

Overview: This company facilitates the sale of cars between dealers and buyers. They wanted to review their data supply chain to learn more about the availability of automobiles.

Problem: Their process hadn't changed in more than 20 years. So how do they improve the supply chain of information that's going out to the customer trying to make a purchase? How do they present more enticing information, like imagery and better automotive specification data, to the customer?

Outcome: This company rebuilt the same analysis three or four times to look at the same thing, but in a different way with more robust data each time. They chose not to settle for one answer or get complacent with their results.

You have the unique opportunity to help your business bring a fresh perspective to a common problem and to help solve it by making your data more actionable. Your data management initiative can result in better answers to supply management's perpetual question: Who are we doing business with? Data analysis with cleaner, well-governed data allows for clear visibility into each link of the supply chain and the corresponding considerations that affect your business, including third-party risk, financial and legal concerns, and environmental, social and governance (ESG) standards.



3 Ways to Make Your Supply Chain Data More Actionable >>

Read More >>

The Data You Need to Succeed: ESG Sourcing Considerations for Procurement Leaders | Supply & Demand Chain Executive (sdcexec.com)







dun & bradstreet

Dun & Bradstreet empowers procurement and supply teams with better tools and insights to help minimize third-party risk in fast-changing, risk-prone environments. With our unparalleled data-driven intelligence, Al-driven software platforms, and data management capabilities, companies can accelerate due diligence, reduce costs, increase operational efficiency, protect brand and reputation, and promote ethical profitability.

No matter your level of risk — from supplier, regulatory, strategic, or geographic risk — our solutions can help transform your risk management capabilities to help you maintain an interconnected and resilient organization.

Visit our website to learn more >>